2016 HULT PRIZE CHALLENGE: CROWDED URBAN SPACES

Can we build sustainable, scalable, and fast-growing social enterprises that can double the income of 10 million people residing in crowded urban spaces by better connecting People, Goods, Services, and Capital?

With Special Call to Action from President Bill Clinton

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Since 2009, the Hult Prize has brought together the skills and talents of some of the world’s brightest business school students to address specific and measurable problems. Over the years, winning teams have found innovative ways to improve nutrition, manage chronic disease, and educate young children, among other challenges. Their solutions have been bold, creative, and, above all, effective.

The challenge posed by this year’s Hult Prize is to address the needs of those living in crowded, impoverished urban spaces by building sustainable, scalable, and fast-growing businesses that can double the income of millions of people by better connecting them with goods, services, and access to capital.

According to the United Nations, approximately two-thirds of the world’s population is expected to live in cities by the year 2050. While cities offer myriad opportunities for many, they also present immense challenges, especially for those living at the bottom of the pyramid. Finding ways to generate greater security and prosperity will require devising solutions that not only help people overcome common obstacles—such as access to transportation, services, quality housing, and regular employment—but also offer compounding benefits across a wide range of key areas.

Social enterprises are uniquely positioned to offer solutions to each of these issues. As you work to develop businesses that combine the benefits of market-based practices with a commitment to the common good, I encourage you to learn from those around you and listen hard to the needs of those you will serve. In doing so, I am confident you will find the answers we need to create a future of shared prosperity, and I look forward to seeing the exciting ideas that this year’s challenge will produce.

Sincerely,

Bill Clinton
Almost **1.5 billion people** living in crowded spaces worldwide are struggling. People **don’t make enough money**, they can’t reach where they need to be, and they are **living in unsafe spaces** that lack infrastructure and connection to basic services.

As urbanization continues, the problem is getting worse. People living in cities, slums, and refugee camps are unable to make enough income, limiting their individual prosperity and stunting broader economic growth. Governments and NGOs have been unable to increase income for the urban poor. Social enterprises may be the best option to address this issue.

Can we build social enterprises that can double the income of 10 million people living in crowded spaces by 2022 by better connecting people, goods, services, and capital?
ALMOST 1.5 BILLION PEOPLE LIVING IN CROWDED SPACES ARE STRUGGLING

People don’t make enough money to afford what they need
People can’t reach where they need to be
Crowded spaces lack infrastructure and basic services
Structures are informal, dense, and sometimes unsafe

URBANIZATION IS CONTINUING TO DRIVE PEOPLE ALL OVER THE WORLD INTO CROWDED SPACES

LIMITED INCOME DAMAGES INDIVIDUAL PROSPERITY AND BROADER ECONOMIC IMPACT

Low-productivity and insufficient employment create a cycle of poverty that takes generations to break
Inefficient markets stunt growth and well-being in communities as well as national development

GOVERNMENTS AND NGOS ARE UNABLE TO INCREASE INCOME FOR THE URBAN POOR

Governments focus on supply-side solutions providing services and distributive equality
NGOs and traditional nonprofits bypass market forces with supply-side solutions

SOCIAL ENTERPRISES MAY BE THE BEST OPTION TO ADDRESS THIS ISSUE

HOWEVER, BUILDING SUCCESSFUL SOCIAL ENTERPRISES IN CROWDED SPACES WILL BE DIFFICULT

Living in poverty is stressful
Earned equality and market forces can be exclusionary
Social enterprise operations are difficult to manage
Partners across the value chain are difficult to work with dependably

CAN WE BUILD SUSTAINABLE, SCALABLE, AND FAST-GROWING, SOCIAL ENTERPRISES THAT CAN DOUBLE THE INCOME OF 10 MILLION PEOPLE LIVING IN CROWDED SPACES BY 2022 BY BETTER CONNECTING PEOPLE, GOODS, SERVICES, AND CAPITAL?

ADDENDUM: Build Successful Social Enterprises
Cities are the foundation of modern human development. Cities can provide the right space to grow, to innovate, to achieve anything imaginable. Prosperous cities fill with entrepreneurs, businesses, and industries that work in harmony with one another to build more opportunities for ever more people. The last century has seen the world’s population make a dramatic move to fill cities, find work, and lead better lives.

However, cities have also been mirrors of false hope for 1.5 billion people worldwide. Uneven gains have created crippling inequality, and generational poverty has become a trap for the very same people who moved to cities searching for opportunity. Without access to quality infrastructure—such as roads and sanitation systems—or affordable services—such as education and healthcare—cities can be a place of hopelessness. Too many people have been unable to make enough money to afford what they need. This year, the Hult Prize is asking you to change that.

By better connecting people through transportation, mobility, and access to goods, services, and capital, new businesses and real solutions can shift the dynamics of failing urban spaces. Low-cost solutions aren’t enough. People need better opportunities. People need more income. People need businesses that serve their needs and support their families. These enterprises can ignite the growth that builds the cities of the future.

Almost 1.5 billion people living in crowded urban spaces are struggling.

People don’t make enough money to afford what they need.

Despite solutions like those driven by the Hult Prize, an estimated 1.5 billion people simply don’t have enough money to pay for the goods and services required to cover their basic needs. Although living in cities offers opportunities that rural areas don’t have, it comes at a cost. People living in crowded urban spaces pay for things that cost less or are free in the country. Transportation, waste removal, water, banking, even using a toilet cost more in cities. When there is already so little to go around, these extra costs add up. Families are forced to make choices every day, balancing constantly changing priorities and urgent needs.

“I have to choose what matters most.”

Rosella is a 62-year-old who lives in Payatas, a slum outside of Manila. She has built her home over the last two decades from a wardrobe, umbrellas, an oil drum, and a tin sheet. She says when she and her husband get their salary, there just isn’t enough for large purchases. She can only build her home and her life one brick at a time.

Paul Mason
Reporter, BBC4 Radio
The income people do earn is volatile and insecure. One week people may earn plenty of money, but they may not earn any for the next month. Managing the ebbs and flows of unpredictable income is difficult and consumes time. Fluctuating income also means that lower-cost business models (such as subscription, bulk purchasing, or up-front payment) are not available to low-income consumers. The impact of fluctuating income is made worse because of limited access to high-quality financial services. Worldwide an estimated four billion people in developing economies don’t have access to financial services that would help them better manage their own income volatility, such as credit, savings, and insurance.

The Hult Prize targets consumers at the Bottom of the Pyramid (BOP) who live in poverty and who earn some income with which to pay for goods and services. Most people who live in poverty are in the base tiers of income. It is important to note, however, that every country—even developed countries—have people living in poverty. In the United States alone, an estimated 46.5 million people live below the national poverty line and struggle to get by.

Not only does transportation cost money, but also because of insufficient infrastructure, it also costs people time. People have to travel to reach the bank or the health clinic or the grocery store, and they lose valuable time that could be spent doing other things. In Sao Paulo, Brazil, traffic congestion is estimated to cost more than US$2.2 billion in lost productivity.

The result is that rather than the best people working in the best jobs or reaching the best services people accept work and resources that are “close enough.” Known as spatial mismatch, these difficulties in transportation and connectivity make urban economies less efficient and cost families valuable time and money.

### Figure 1. The Hult Prize primarily targets consumers who live in the middle and bottom tier of the pyramid

<table>
<thead>
<tr>
<th>Income Tier</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Income</td>
<td>$25,000+</td>
</tr>
<tr>
<td>Middle Income</td>
<td>$4,000–$25,000</td>
</tr>
<tr>
<td>Low Income</td>
<td>&lt;$4,000</td>
</tr>
</tbody>
</table>

Costs associated with mobility make it so that people are forced to work where they live and live where they work. People may not be able to afford the cost of looking for work, which makes the price of commuting every day completely unaffordable.

“I can’t afford to go home.”

In China, many rural youth seek work in such megacities as Shanghai and Beijing. Some travel for hours from their villages to jobs in the city that allow them to earn enough money for their families. Because the commute is so far, many spend nights sleeping where they work, hunched over on tables or benches and return home only occasionally.

ZHAN YOUBING
Photographs of “chunyun”

CONNECTED PEOPLE: Crowd-sourced traffic
In Nairobi, people sit in traffic and lose hours a day trying to reach their jobs, visit families, and complete errands. Laban Okune Anunda developed an internet platform and mobile app similar to Waze, called ma3route, that allows locals to report where traffic is bad and accidents have happened. They hire local engineers and make money through advertisements and app subscriptions.

MA3ROUTE
CROWDED SPACES LACK INFRASTRUCTURE AND BASIC SERVICES

Many services that the developed world takes for granted are not available in crowded spaces where the world’s poor reside. Indeed, in many developing countries, infrastructure, such as paved roads and electricity grids have not reached all consumers. Although many consider this to be a rural problem, more than 200 million people living in urban areas have no electricity to help them cook, study, or be productive after nightfall. While such new energy technologies as solar and wind power offer promise for developing countries that have limited infrastructure resources, practical day-to-day usage has not yet become accessible for low-income people.

Other services are also difficult to access. Reaching consumers in areas lacking infrastructure carries significant costs. For delivery, the “last mile” (or last kilometer) of transportation of goods and services can make market-priced items too expensive for people earning less than $5 per day. Getting a product to its final destination is estimated to add about 28% to the delivery cost, and in some industries, the last mile makes up more than 53% of the logistics costs. Other costs for providing products in low-income areas, including insurance and ad hoc infrastructure, can also make goods more expensive for the poor.

Because people don’t have enough money and the communities they live in are difficult to serve, basic needs remain unmet. Goods and services are either too far away or too expensive. Low-income people in these crowded spaces are not connected and don’t have affordable access to:

- Education: quality and available for girls
- Sanitation: clean toilets and effective waste removal
- Food and Water: safe, fresh, and nutritious
- Energy: safe, reliable, and sustainable
- Healthcare: preventative and safe
- Transportation: reliable and efficient
- Financial Services: secure and nonpredatory
- Information Communication Technology (ICT): easy and connected

These services present a great opportunity to social enterprises serving the world’s most vulnerable. For example, global remittance payments are expected to top $681 billion in 2016. Social enterprises finding better ways to lower costs and provide accessible service can capture hundreds of millions of dollars of new value.

Figure 2. Market expenditure estimates show that such basic necessities as food prevent consumers from spending on other needs.

I can’t get what I need

Sabhadhrabai Ramachandra Bhagat lives in a shanty near Mumbai. She wakes up every day at 4:30 a.m. so that she is ready to get water when it starts flowing at 5:30 a.m. It only flows four hours per day at the tap nearest to her. Even though she has to wait, she can usually find enough water. In the summer, however, there are shortages, and the timing is less predictable. The only other water source is a broken pipe used for washing clothing that is a 25-minute walk away.

KALPANA SHARMA
Waiting for Water, SPARC Study
Lack of secure tenure is extremely damaging for vulnerable people who may be forced to relocate regularly or pay bribes in order to maintain their renting rights. In some areas, only 28% of structures are considered permanent constructions. In refugee camps, there are no permanent structures.

Structures in crowded urban spaces are packed tightly together. From housing to workshops, from hospitals to school rooms, buildings must be close together to minimize the waste of precious land. Most homes consist of a single room and house many family members. A sample survey conducted in seven Sub-Saharan African countries found the average room occupancy to be four people per room. In contrast, in the United States, almost 97% of households have average room occupancy well below one person per room. This extreme density in developing urban regions contributes to unsanitary conditions and the spread of disease.

Because so many people are utilizing the same space and spaces are used for purposes other than those for which they were created, structures can be unsafe. People residing in crowded spaces are more vulnerable to building collapse, fire, and other structural failures. Data analysis of crime statistics in India in 2012 showed that in that year alone an estimated 2,651 people were killed in structural collapse. With few options as prices around them skyrocket, millions of people live in buildings they know are unsafe.

While not all crowded urban spaces are illegal, many, including the slums that house one billion people worldwide, are informal. This means that people living in these areas lack support from the government and access to utilities and legal tenure.

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Crowded spaces are difficult. As rural populations around the world migrate to city centers in pursuit of a better life, they often add strain and hardship to both themselves and the spaces they occupy.

Simultaneously, city borders continue to expand, creating megacities across the developed and emerging markets. War and displacement have led to the largest global refugee base of all time. This mega workforce, however, is sidelined and pulling the global economy down even though many are educated and have the skills, training, and physical ability to produce economic output.

Poverty camps exist all over the world. Social welfare dictates where the poor live, what schools children must attend, and what types of services are available. Lack of education and economic opportunity have created a downward cycle of poverty that is difficult to break.

The interviews collected below by Meera Bapat and Indu Agarwal give an inside perspective on what life is really like in crowded urban spaces. These interviews were funded by DANIDA, the Danish Government’s bilateral aid agency.

SAGIRA, MUMBAI:
When we came here in 1972, we did not know where to fetch water. We used to go to a hotel (restaurant) to have a cup of tea and bring a can of water from there. After we settled down on a pavement, we bought an old 5-litre can for 25 paise(3) and filled it in the morning. We used to ask around where a tap was working, and we used to collect water there. If that did not work, we used to go to the JJ hospital morgue, bathe there and fill our water containers. After we put up plastic sheet roofing on the pavement, we used to go to Kamathipura nearby to collect water at the tap in the 14th lane. There the people used to refuse to give us water saying “…they have brought toilet cans!” We did not understand what they meant. Then a woman told me that it was because of the pots that we carried to collect water. Then I bought a plastic bucket. If we did not get water in the 14th lane, we tried to get it in other lanes. We used to go in search of water at 3:30 in the morning and collect three or four handaas (an urn that can hold 10–12 litres of water) by 7:00. If we did not get water, we used to buy well water. Even now we sometimes have to buy well water for five rupees per handaa. We buy four or five handaas per day, just for cooking.

Local elections took place two months back. Our only demand was water—whoever gave us water would get our votes. We made ten boys our spokesmen. The one with a bow and arrow (the symbol representing the political party Shiv Sena) gave us two taps before the elections. Now we have water. Those who had money spent 1,500 rupees or so extra and got individual taps inside their shacks. I also got one. We have fixed a rate of 20 or 15 rupees every month per family. These are unofficial taps. We cannot get taps officially. We have filled in forms so many times, but the municipality throws them away. There is no provision for giving water taps to pavement dwellers.

To avoid fights over water in our area, three boys organize everything. Yashawant Jadhav gave 150 taps in all, but each area got one or two. Sophia Zubair Road (pavement settlement) has one, Dintinkar has two, and Peer Khan has five or six. There was a big fight at the tap on the corner, and people began to beat each other. The municipality person took away a hose pipe and a couple of handaas. The boys rushed to Yashawant Jadhav who sorted out the problem. Since then the boys have supervised things.

REHMAT, MUMBAI:
We used to bathe and wash our clothes and vessels with water from the textile mill. That was for free. Then the mill closed down, and the water stopped. That was a big problem. There was a water line passing under our houses. Two or three of us thought that we should steal the water by tapping into the pipe. Plumber Patel and I did it first five years ago. The cost of a pipe and digging came to about 1,000 rupees.

Water came in the morning from 4 until 7 o’clock. A lot of people came to fill the water at the tap. There used to be a queue for water, and we used to charge 20 rupees per month per person. In a few days, the cost of installing the tap for stealing the water was recovered. By then, many other families wanted to have their own taps. So there were six or seven more such taps, and the municipality came to know about it. They came with the police, but we had come to know that the municipality people were coming, and everybody shut their taps and concealed the connections with stones. After the men left, we filled the water. We then placed a few people on the lookout for the inspector. After a few days, we made friends with a person from the municipality. We asked him to install a tap in our mosque and madarssa. He took about 600 rupees from us and put in a tap. Now they come to disconnect our taps once every month or two. Still, there are always two or three taps left. Also, the main tap is never disconnected. It is always there.
Urbanization is continuing to drive people all over the world into crowded spaces.

The difficulties of living in and managing crowded urban spaces are growing. In 1950, less than 30% of the global population was considered urban. Today, more than half of all people on earth live in cities. It is expected that the urban population will continue growing for at least the next 30 years, when six billion people will live in urban areas.

As the world becomes more urban, developing countries will have a larger role in responding to and addressing the needs of urban environments. In the next 15 years, more than 96% of all urbanization will take place in the developing world. With only 83% of the total global population, a disproportionate number of poor urban dwellers reside in emerging economies in Asia, Africa, and Latin America.

Each of these regions is uniquely important to the shape of the global urban environment. Asia (including the Middle East) is by far the most populous region, accounting for 53.4% of the global urban population. Latin America has the highest rate of urbanization, with more than 80% of the population living in cities and slums. Africa has the lowest levels of urbanization, but it is expected to increase rapidly, exceeding more than 45% growth in urban population in the next 10 years.

Figure 3. The global population is growing and becoming more urban.

Figure 4. Global urban populations are growing in developing regions.

I have nothing
Syamend was studying Arabic at a university in Damascus when civil war hit Syria. He left everything behind. When he reached a refugee camp in Turkey, he knew he could not stay, as it got more crowded every day. His boat capsized on the way to Greece; entire families he had been traveling with all drowned. Now, he says, “All I want is to be a normal human being with a job and to be reunited with my family.”

REFUGEE ACTION
Refugee Voices, Syamend
Within these regions, urbanization takes a variety of forms. Crowded spaces manifest themselves differently according to geography, access to natural resources, and culture. Most crowded urban areas housing the world’s poor are one of the following three environments:

MEGACITIES: Urban populations are seeing expanding borders and populations over 10 million. Around 70% of megacities in 2015 are in developing countries. Megacities frequently have some infrastructure but are not equipped for the rapid, exponential growth they experience.

SLUMS: Defined by UN-Habitat, these crowded areas grow on city peripheries as migrants and lower-income populations seek opportunity close to city centers. Close to one billion people reside in slums in substandard, informal structures.

REFUGEE CAMPS: Huge displaced populations are fleeing war and conflict and create densely populated areas that are often more permanent than they are intended to be. Globally, there are more than 50 million refugees, including millions of perpetual refugees. The situation worsens every day as refugees from Syria flee civil war. Refugee camps have the fewest resources and most limited opportunities for employment.

<table>
<thead>
<tr>
<th>CITY</th>
<th>COUNTRY</th>
<th>POPULATION (ESTIMATES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo</td>
<td>Japan</td>
<td>37,800,000</td>
</tr>
<tr>
<td>Jakarta*</td>
<td>Indonesia</td>
<td>30,500,000</td>
</tr>
<tr>
<td>Delhi*</td>
<td>India</td>
<td>24,900,000</td>
</tr>
<tr>
<td>Manila*</td>
<td>Philippines</td>
<td>24,100,000</td>
</tr>
<tr>
<td>Seoul</td>
<td>South Korea</td>
<td>23,500,000</td>
</tr>
<tr>
<td>Shanghai*</td>
<td>China</td>
<td>23,400,000</td>
</tr>
<tr>
<td>Karachi*</td>
<td>Pakistan</td>
<td>22,100,000</td>
</tr>
<tr>
<td>New York</td>
<td>USA</td>
<td>20,600,000</td>
</tr>
<tr>
<td>Guangzhou*</td>
<td>China</td>
<td>20,600,000</td>
</tr>
<tr>
<td>Sao Paulo*</td>
<td>Brazil</td>
<td>20,300,000</td>
</tr>
</tbody>
</table>

Figure 5. Most megacities are in the developing world (*indicates developing country)

<table>
<thead>
<tr>
<th>SLUM</th>
<th>ADJACENT CITY</th>
<th>POPULATION (ESTIMATES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neza-Chalco-Itza</td>
<td>Mexico City, Mexico</td>
<td>4,000,000</td>
</tr>
<tr>
<td>Orangi Town</td>
<td>Karachi, Pakistan</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Dharavi</td>
<td>Mumbai, India</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Khayelitsha</td>
<td>Cape Town, South Africa</td>
<td>400,000</td>
</tr>
<tr>
<td>Kibera</td>
<td>Nairobi, Kenya</td>
<td>200,000</td>
</tr>
</tbody>
</table>

Figure 6. Slums are located primarily near large cities in the developing world

<table>
<thead>
<tr>
<th>CAMP</th>
<th>FLEEING MOSTLY FROM</th>
<th>POPULATION (ESTIMATES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dadaab, Kenya</td>
<td>Somalia</td>
<td>400,000</td>
</tr>
<tr>
<td>Dolo Ado, Ethopia</td>
<td>Somalia</td>
<td>200,000</td>
</tr>
<tr>
<td>Kakuma, Kenya</td>
<td>Somalia, Sudan</td>
<td>125,000</td>
</tr>
<tr>
<td>Al Zaatri, Jordan</td>
<td>Syria</td>
<td>120,000</td>
</tr>
<tr>
<td>Jabalia, Gaza Strip</td>
<td>Palestinian Displacement</td>
<td>110,000</td>
</tr>
</tbody>
</table>

Figure 7. Refugee camps surround areas of war and conflict
Limited Access in the Gaza Strip

The Gaza Strip is one of the most crowded and least built-up urban environments in the world today, with a population of 1.7m and density of almost 10,000 people per square mile within a relatively flat area.

This is exacerbated by population growth rates and restrictions on the movement of goods, services, and people within and across its borders, preventing the proper planning and development of a functioning city that provides accommodation, sanitation, health, education, and food to its residents.

Key Facts:

- Restrictions on the movement of people (<200/day on avg in H1 2013) and goods (<1 truckload per day in H1 2013) across and within the Gaza Strip (1 official functioning crossing in 2013) continue to impact its 1.7m residents by reducing access to livelihoods, essential services, and housing.
- The volume of construction materials that entered Gaza via underground tunnels in 2013 was over 3x the amount allowed through the crossing.
- Power outages (up to 12 hrs/day) and external trade restrictions discourage investment, prevent sustainable growth, and perpetuate high levels of unemployment (34% of able and willing) and food insecurity (57% of households).
- Population growth has put pressure on failing health, education, water (25% of households receive running water every day; 90% of extracted water is unsafe for human consumption), and sanitation services (90m litres of treated and untreated sewage are dumped into the sea each day).
- Access to land within 300 meters from the fence surrounding Gaza is generally prohibited, and access to farming areas beyond is risky.
- Fishermen are allowed to access less than one-third of the fishing areas allocated to them under the Oslo Accords: six out of 20 nautical miles.

Entrepreneurial Opportunities in Rio de Janeiro

Rio De Janeiro has an estimated population of 6.35 million, making it the second-largest city in Brazil, third-largest metro area in South America, and sixth largest in the Americas.

The city has a population density of 12,380 people per square mile. Almost one in four people—1.4 million in total—live in urban slums (up from 13% in the 1970s). Although per capita income has doubled since 2000, many entering the labor markets are illiterate, making it challenging for businesses and the government to provide employment. Between 2008 and 2009, there were 14,057 entrepreneurial ventures in the Rochina and Maguinhos slum communities of Rio, but only 1,083 (7%) operated in the formal sector. The other 93% of ventures operated in the unregulated informal economy.

Local police, called Pacifying Police Units (UPPs), have been brought in to improve security in 28 of Rio’s slums. The results have led to a 75% decrease in the number of violent deaths, a 15% increase in property prices between 2006 and 2011 attributed to these units, and an increase in the revenues of business located in the slum communities. These sorts of interventions attract direct foreign investment and make the area more enticing for entrepreneurs and local businesses.

Former fisherman and musician David Vieira Bispo, a resident in the Chapéu Mangueira slum community in Leme, had taken the name of the community to other regions of the country and even abroad. About two and a half years ago, he decided to open a pub with his name.

“We were the first pub in the slum community to compete for prizes of gastronomy,” he says proudly—the appetizers won prizes. “Today, I recognize myself as an entrepreneur. David’s Pub creates jobs. The slum is no longer the ugly duckling of the city. People feel that this is an area society has reclaimed.”
Higher Employment and Higher Poverty in Columbus, Ohio

Poverty is not limited to the developing world. Although the average incomes are higher in Europe and the United States, higher costs of living mean that income may still leave families homeless, struggling to afford food or unable to pay for critical medical care.

In Columbus, Ohio, for example, simply creating jobs has not led to a reduction in the poverty level. The region’s unemployment rate is about 5.9% and has been falling for the last several years. However, despite more people being employed, the poverty rate has not changed or dropped below 18%.

People living in the city and working full-time in a minimum wage job will earn about $15,000 per year. In order to cover the costs of living in the city—from rent to transportation to food—it is estimated that a family with two adults and one child in Columbus would need almost $40,000 per year.

The data shows that employment alone is not the solution to lifting people out of poverty. Jobs that don’t cover the cost of living are not an adequate solution. Poor-quality, low-paying jobs are still not helping people pay for what they need. The real solution is to create opportunities to generate more and sufficient income to be able to afford the cost of basic services.

Solutions to this year’s challenge of crowded urban environments, whether focused on the US or otherwise, must focus on enabling poor communities to better connect and create value in the form of high enough incomes that enable them to rise above the poverty level wherever they reside.
Limited income **damages** individual prosperity and broader economic productivity.

Low-productivity and insufficient employment create a cycle of poverty that takes generations to break.

For individuals and families, the inability to connect with the right resources at the right time causes real hardship. The problem is particularly pronounced for children and young people. Children under 18 are expected to make up more than 60% of the urban population in developing countries by 2030. In some developing countries, more than two-thirds of youth are unemployed, underemployed, or working in low-quality, irregular, informal jobs. When young people lack opportunities, they often follow a trajectory for the rest of their lives in poverty that leads to social and economic exclusion.

It is important to note the significant variance in what “poverty” means in different areas. The World Bank uses figures related to this in the Bottom of the Pyramid who earn less than $3,000 (2002 PPP) annually, which is almost $3,986 in 2014 dollars. Even within this segment, cities vary dramatically. Some urban areas have high percentages in the lowest segment, less than $500 annually, while others are more equally distributed. This makes it difficult to apply single price points, market insights, or delivery techniques.

Additionally, the informal economy is critical to growth in crowded urban spaces. The vast majority of urban poor in developing countries earn some or all of their income from informal economies. In developing countries, around 60% of activity comes from the informal, unregulated sector. In Africa, the average is near 70%. The informal economy is a sector that operates outside of government regulation. This means that working in the informal sector can be difficult. Employees have fewer rights and protections than those in the formal sector, such as guaranteed wages or payment for overtime. Generally, the informal economy is associated with growing poverty. Finding ways to work with the informal sector is critical to understanding consumer income sources and leveraging value chain partners in developing cities. Because of these limited opportunities, poverty can become an inescapable trap. Working hard is not enough, and families suffer for generations with no way out. When families never have enough money to save for medical emergencies, periods of unemployment, and aspirational higher education, changing the circumstances of how they live in a single generation is next to impossible.
Beyond individuals and families, however, the difficulties associated with poorly connected urban areas even affect the global economy. Prosperous cities are critical to growth and productivity. People who live in cities make up just over 50% of the population, but they contribute more than 80% of global GDP. In nations where cities are built without proper planning, support, and regulation, growth severely suffers. In many countries, increased productivity follows higher rates of urbanization, but the UN suggests that this is not always the case. When cities and urbanization are the result of a supply push, people migrate as an attempt to escape poverty, famine, and war. In these countries, higher rates of urbanization did not yield any GDP increase.

On the other hand, cities that are the result of demand pull urbanization experience migration from growth and employment opportunities. These cities rely on agglomeration economies, or the synergy industries enjoy from being located in proximity to one another—close supply chains, more qualified employees, knowledge centers, shared infrastructure, and adjacent opportunities. When cities fail to connect the right resources in the right way, economic clusters are unable to develop. Individuals lack the income to improve their own lives, and businesses lack the capital required to grow to scale. What remains are splintered economies where businesses and people have to seek different things in different places or do without altogether.

Sufficient income is critical to empowering the poor to purchase the goods and services they need, stimulating economic activity and community growth. This income should be generated by connecting people, goods, services, and capital in crowded urban spaces.

**Figure 10.** Economic clusters allow for growth to be catalytic; unconnected resources are unable to leverage agglomeration economies
Fairchild 8: The Economic Opportunity Cluster

Our hope is to empower 10 million crowded urban space dwellers to break the cycle of poverty through finding new and innovative ways to connect them with not only the basic necessities of human life but also with the opportunities that enable them to take ownership of their own destinies. These opportunities may exist locally and are in need of scale or may need to be conceived from scratch as microenterprise start-ups. One thing we know is that solutions need to be bold and challenge previous decades of ideas and programs that don’t seem to be of the right size or scale and have yet to unlock the ability to break poverty.

Increasing incomes through entrepreneurship is a viable supply-side tool to provide slum dwellers with access to alternate, additional, or greater principal sources of income, allowing them to more rapidly scale out of poverty. Beyond the individual entrepreneur and his family, research has shown that a single successful entity in one area can effectively spawn an entire village of entrepreneurs and start-ups.

In fact, research conducted in 2014 by Endeavour shows that some of the greatest entrepreneurial ecosystems of today were in fact started by one successful company (or a few), which then served to launch a wave of start-ups. Whether examining Silicon Valley’s growth in relation to the original founders of Fairchild Semiconductors, which alone led to the spin-off of 31 firms in just 12 years, or the amazing interconnectedness of the Buenos Aires Tech Sector, where a few key start-ups led to an entire ecosystem, the role of entrepreneurship and innovation is fundamental.

This concept of economic opportunity clusters created around one or a few successful entities can be applied to urban slums, turning an economically depressed village into a workforce that drives economic empowerment and inclusive economic growth.

The Creation of Silicon Valley
Fairchild generated 31 spin-off firms in just 12 years

The Buenos Aires Tech Sector
A few key start-ups led to an entire ecosystem
Governments and NGOs are unable to increase income for the urban poor.

GOVERNMENTS FOCUS ON SUPPLY-SIDE SOLUTIONS PROVIDING SERVICES AND DISTRIBUTIVE EQUALITY

Worldwide, governments are able to provide context for markets to operate and establish regulation that promotes fair and equal exchanges. In many high-income countries, too, governments use tax revenue to provide subsidized or free services to low-income citizens. In many developing economies, though, the government lacks critical tax revenues that would enable them to provide these services.48

When it comes to income, governments provide citizens distributive equality—fiscally, that’s resources that are collected and given out by authorities in the form of welfare or other direct benefits.49

NGOS AND TRADITIONAL NONPROFITS BYPASS MARKET FORCES WITH SUPPLY-SIDE SOLUTIONS

The role of nonprofits developed from a critical need of the world’s most vulnerable being unable to participate in existing markets or being too resource poor to lift themselves out of poverty. These organizations play an important role in ensuring that the most disadvantaged receive help and aid that business and government are not always able to provide.50

By nature, these organizations have sought to provide services at no or below-market cost to those in need. This model relies on the costs being covered by charitable individuals or foundations and is neither scalable nor sustainable. Without growth in the broader economy to provide charity to run their operations, NGOs would be unable to help those in need.

In addition, NGOs have not traditionally acted as large-scale employers for local communities. In fact, many NGOs staff their operations teams with emigrants from high-income countries,51 mitigating the impact they could have as income generators for the poor they are seeking to serve.
Social enterprises may be the best option to address this issue.

The Hult Prize model is one of promoting and increasing earned equality—that is, income and growth that people work for. Income-based solutions are essential for sustainable development and dependable economic growth. These demand-side solutions are most effectively achieved through private sector solutions. Social enterprises uniquely deliver business returns and social impact.

By connecting people, goods, services, and capital, Hult Prize social enterprises are mission oriented and serve some of the world’s most vulnerable consumers. These businesses are also created to be sustainable. In other words, they seek to earn more revenue than they pay out in costs.

These top-line profits can be reinvested into the company, or they can be paid out to owners, shareholders, and employees. Finally, social enterprises make market-driven decisions. Utilizing traditional economics and supply and demand principles help social enterprises create business models that enable the organization to be sustainable.

There are a number of social enterprises and corporate social ventures that have already begun testing small models of increasing income by connecting the urban poor to goods, services, and capital. In Latin America, Frogtek Mobile is working to increase profit and income of microretailers and shop owners through mobile technology and business services. In Bangladesh, Waste Concern has employed local residents to collect and sort recyclable and compostable trash for a small market-driven fee. Finally, Grameen-Danone partnered to provide healthy yogurt and prevent malnutrition, using local people as key delivery personnel and purchasing only local milk. These businesses show that connecting people, goods, services, and capital can double the income of poor people living in crowded urban spaces.

Figure 11. Social enterprises unite social and market principles

- Use existing channels
- Find customers who can pay
- Pursue revenue and sustainability
- Serve the least fortunate
- Tackle humanity’s greatest challenges
- Offer better availability and affordability

Connecting People to Opportunities

Upwork—formerly oDesk—is an on-line platform that allows freelancers to post profiles about their skills and companies or individuals to post jobs they are looking to have filled. Millions of hours of work are completed as needed instead of companies being required to hire staff full-time. As a result, people who are looking for work and people who are looking to have jobs done are able to fulfill a more efficient match of time and skills. Upwork is able to increase the amount of money such specialists as translators, designers, and developers are able to make through an accessible and scalable platform.

UPWORK
Forbes
However, building successful social enterprises in crowded spaces will be difficult.

**BANDWIDTH IS A LIMITED, SCARCE RESOURCE**

Serving and employing vulnerable consumers can be a challenge. People who are constantly forced to make choices about scarce resources have limited the bandwidth they have available to do other things. Research has shown that decision-making, impulse control, and planning ahead are all more difficult for people who are dealing with extreme scarcity in income and resources. The result of these mistakes is much more costly for those living in poverty than those who have means.

**MANY PEOPLE DON’T HAVE ENOUGH TRAINING**

The urban poor also lack education and training. Even for those who may have attended school, many quality jobs require specific training that is difficult to attain. Limited bandwidth and training make it more difficult to sift through complexity and make good choices, and the more severe consequences experienced by the poor make the cycle of poverty much more difficult to escape. What this means for your social enterprise is that you must work to offer clear incentives, provide good training, and ensure minimal interference from irrelevant issues.

**TECHNOLOGY SOLUTIONS ARE DIFFICULT TO ACCESS**

Several factors prevent low-income people in crowded urban spaces from accessing technology-enabled solutions. Limited resources prevent facilities from acquiring tablets or other electronic devices that can improve efficiency and connectivity. Environment and culture-friendly content and software are typically not designed for the urban poor. Finally, poor infrastructure limits Internet access in many areas. However, youth today are more connected, more informed, and better resourced than any generation before. Technology can provide opportunities if it is used in appropriate ways.

**Earned equality and market forces can be exclusionary**

SOME PRIVATE SECTOR SOLUTIONS EXPLOIT CONSUMERS AND WORKERS

Social enterprise solutions rely on market forces and aim to have sustainable operations. When serving the most vulnerable, though, business can quickly turn to exploitation. Too often, poor consumers are taken in by products that are too good to be true or taken advantage of as employees in businesses simply looking to make a profit. For example, some companies knowingly (or claim plausible deniability to) hire children as workers because they issue broad policies condemning the practice or claim government regulation is responsible for oversight.
MISSION PRINCIPLES
ENSURE SOCIAL ENTERPRISE EFFECTIVENESS

Creating services and opportunity that serve the disadvantaged requires constant dedication to mission principles and consumer-oriented service. Not every social enterprise has to serve every consumer or employ every person, but you must serve those you do choose honestly. Holding your consumers’ (and employees’) best interests as at least as important as profits is what makes social enterprises unique and critical to global development. Economic inclusion means empowering and connecting marginalized populations with employment and income. Just because the market will bear wages lower than people can afford to live on does not mean it is the right thing to do, particularly in the long term.

Social enterprise operations are difficult to manage

FINANCES MUST BE EFFICIENT

Building a social enterprise in the developing world is difficult. Finances need to be efficient, navigating razor-thin margins and fluctuating supply and demand. Managing cash collection, inventory, and supplier payments is key to ensuring a healthy cash position. To reduce costs, social enterprises will need to grow significantly to enjoy economies of scale.

ASSETS MUST BE ABLE TO BEAR RISK

Social enterprises are also exposed to higher risk from supply chain inefficiency, structural hazards, corruption, and high crime rates. Most insurance organizations are unable to assess the risk, claims, and premiums accurately enough in informal urban areas to build a viable business. As a result, social enterprises have to manage their environment and assets to ensure continuity for consumers and employees.

SOLUTIONS NEED TO CONSIDER CULTURE AND GENDER BIASES

A social enterprise solution can only succeed if the local customs, traditions, and beliefs are integrated into the business model. By focusing on these key aspects, the probability for people to accept and align with the program greatly increases.

Partners across the value chain are difficult to work with dependably

Building connectivity can take many forms, but all of them require work with broader value chains and networks. In developing economies, partners are often working under the same strains of limited infrastructure and resources as your social enterprise. Additionally, the size and scope of the informal economy will influence how businesses run. Navigating public services and evolving government regulation will impact how effectively you can grow.
Can we build sustainable, scalable, and fast-growing social enterprises that can double the income of 10 million people living in crowded spaces by 2022 by better connecting people, goods, services, and capital?

The 2016 Hult Prize is asking you to design a social enterprise that improves connectivity and increases the income of the urban poor who may live in megacities, slums, or refugee camps.

How you make connections is up to you. The key is providing solutions that meet two criteria:

1) doubling the income of people living in crowded urban spaces, and
2) running a social business that meets market needs.

Ways to create connection may include:

**CONNECTING PEOPLE:**
finding new ways to move people from one location to another with transportation or other mobility solutions

**CONNECTING GOODS:**
creating new delivery systems that lower costs and increase efficiency

**CONNECTING SERVICES:**
identifying channels to make services more available and accessible with technology or other network solutions

**CONNECTING CAPITAL:**
making the right capital available for the right people at the right time, including the management of remittances and business capital

These types of connections may form solutions that meet any variety of basic human needs. The winning social enterprise will have significant and measurable impact on increasing income for those living in poverty in crowded urban spaces.

A list of questions to help develop a good winning business solution is provided overleaf. The social enterprise should have a sustainable business model. It should increase income opportunities. It should have staged implementation and clear milestones. Overall, the winning solution should scale rapidly to increase income for an ever increasing number of people in a relatively short time. Solutions should double income for 10 million people by 2022.
Guiding Questions

**More Income**

- Do people have more/better access to earning additional income?
- Is the income secure?
- Does any additional employment reflect standards of quality and decency?

**Better Outcomes**

- Do products/services improve the lives of those living in crowded urban spaces?
- Do solutions create network effects (agglomeration economies)?
- Are resources used responsibly?

**More Empowering**

- Is the social enterprise not predatory or exploitative?
- Does the mission serve consumers and employee needs?
- Are people in a better position to participate in the broader market economy?

**Better Connectivity**

- Has the social enterprise improved efficiency of the local value chain?
- Are resources more accessible—by quantity or proximity?
- Do people have more freedom and mobility?
BUILD WITH LOCAL PARTS AND KNOWLEDGE

- Use supplies that are available where your consumers are
- Apply insight and knowledge of the community
- Hire and retain local talent
- Provide attractive options, such as wages, training, and perks

CONNECT PEOPLE, GOODS, SERVICES, AND CAPITAL

- Offer solutions that are the right size for your consumers
- Focus on human-centered design meeting basic needs
- Consider the importance of mobility and accessibility

DEVELOP STRONG CHANNELS

- Tap existing channels that reach consumers quickly
- Leverage technology and new opportunities
- Create connections that add value in the market

UNDERSTAND YOUR CONSUMERS

- Recognize behavioral motivation and incentives
- Identify targeted segments
- Build trust and reliability
- Consider employees and microfranchisees as your consumers

CREATE VALUE

- Provide win-win value propositions for partners
- Offer business models with flexibility for volatile incomes
- Identify network and ecosystem opportunities beyond your own business

How can you do the same?

To develop a business, leverage leading practices from other companies, nonprofits, and social enterprises. Different industries may have key insights to find growth and opportunity in new areas. In this section, you’ll find general guidance that may help you pressure test your concept and ideas.

Companies that are able to think broadly and holistically about the entire business innovation value chain are more likely to be able to capture value. Social enterprises developed for the Hult Prize, such as Aspire Food Group, Nanohealth, and IMPCT.co, have worked across these segments to scale offerings that will help double income in crowded urban spaces. They are working on the ground today to produce at lower cost, find offerings that delight consumers, deliver quickly and effectively, build brands that inspire trust, and use partners and networks to capture new value in new ways.

Addendum:

Build successful social enterprises

How can you do the same?
Value creation and greater income generation in crowded urban spaces can be achieved in many ways.

The Hult Prize has awarded USD 1,000,000 in seed funding to a variety of social enterprises. These enterprises each use different tactics to create value, yet all of them have found ways to double income in crowded urban spaces.

The examples on the following two pages should serve as a guide to three potential avenues:

a) establishing a microfranchise (Aspire),

b) empowering everyday dwellers to become income generators (Nanohealth), and

c) scaling and training existing entrepreneurs (IMPCT).

Almost one billion people worldwide lack food security. They struggle to provide enough safe and nutritious food to their families. Every day they work hard to pull together the best meals they can, but over time, malnutrition has a significant effect on quality of life and health. In addition, as people continue to move from rural to urban areas, they find that they don’t have adequate skills to find work and are pushed into slums.

Aspire Food Group utilizes an innovative solution to create more nutritious insect-based food options, more than double income for small entrepreneurs, and create a more sustainable food value chain from beginning to end. They train and empower entrepreneurs to be able to farm their own insects, feed their families, and increase their income. Aspire empowers entrepreneurs and employs thousands of individuals who would otherwise not have a job. Whether an injured retiree or an adolescent struggling to make ends meet, Aspire provides both with more than 10 times the income by better connecting know-how, entrepreneurs, consumers, and nutritious food.

Insects need 10 times less feed than cattle to produce the same amount of protein and are thus a cost-effective, nutritious option. The United Nations has recognized Aspire as providing “a viable potential solution to the global food crisis.” Many residents of slums in Ghana, for instance, a pilot location for Aspire Foods Group, suffer from severe iron deficiencies (70% of pregnant women). One hundred grams of Palm Weevil Larvae, a key product of the company, has one-fourth the daily recommended intake of iron.

Aspire has spawned an entirely new industry poised to rapidly scale around the world and have significant impact on the lives of people living in urban slums.
Doubling Income by Connecting People, Goods, Services, and Capital

Millions of children in urban slums are currently sitting idle in unsafe informal day care centers run by existing entrepreneurs who have no training or adequate resources. Parents are willing to pay almost 20% of their monthly income to these informal day cares in order to be able to work. In Latin America alone, there are 200,000 such informal day cares with on average four kids each charging $2/day, which means that $1.6m is spent every day on childcare services.

By scaling up the quality and capacity of these informal structures, IMPCT hopes to enable more parents to work while their children receive high-quality early education. By identifying talented existing entrepreneurs and providing them with the capital (donors), know-how (training), and curriculum (Montessori) to build and run a successful day care with more students, IMPCT allows these young mostly female entrepreneurs to double or triple their previous income while better connecting children and parents to high-quality, dependable, and safe day care services. On average, mothers earn between $80 and $120 per month with their informal daycares. Owning an IMPCT Playcare, on the other hand, pays a salary and profit share that averages $220 per month. IMPCT's first teacher, Alma, for example, went from making $80 with her informal day care to $300 in her first month running her Playcare.

IMPCT has already reached more than 9m people with hundreds of major media appearances across three continents. They have convinced 50 companies representing 65,000 employees to develop matched investment programs on their platform and engaged 750 donors from 45 countries to build their first playcare.

More than half of patients with diabetes and hypertension in the urban slums of India remain undiagnosed, as there is no population-level mass screening program, doctors and hospitals are often located hours away from the patient (a full day or more just to visit creates financial disincentive), and slum dwellers don’t have the financial means to afford the doctor’s visit. This leads to underdiagnosis, poor treatment, and poor prescription compliance, which, in turn, means greater aggravation of the disease and eventually premature death.

NanoHealth addresses this problem by offering a cost-effective and scalable model to tackle the growing burden of chronic diseases in urban slum locations around the world. Their Doc-in-a-Bag™ product allows the rapid and accurate diagnosis of disease to take place on-site and cheaply, thus preventing the patient from having to visit the doctor at all unless diagnosed. Patients no longer have to make the difficult choice between taking a day or more off from work or paying expensive doctor’s fees and improving their health.

NanoHealth is able to achieve the above by creating, employing, and training a network of community health workers called “Saathis” and providing them with a low-cost point-of-care device. These Saathis form a strong network of community health workers, extending the reach of the health system right to the patient’s doorstep. In addition, NanoHealth is able to double and sometimes triple their employees’ incomes; many of these Saathis were previously untrained and uneducated community members with access to only the lowest-paying jobs. With the combination of the right care model, scalable technology, and impact-centered approach, NanoHealth aims to prevent one million premature deaths every year while at least doubling incomes in the areas they operate in.
Enterprises that build competencies have the potential to create additional income for millions.

Enterprises that create opportunities for people to gain skills and competencies introduce the possibility of new types of employment and income generation. Such skills as English, programming, or other artisan trades that will be highly sought after in the 21st-century economy can open doors for the urban poor. Additionally, training and education offers significant potential to scale and reach bold targets like those set by the Hult Prize.

Worldwide, studies show that learning English can have a significant impact on innovation, quality of life, and income. Individuals who are able to speak English are able to engage with a broader array of businesses and connect with new and transformative ideas.

Education First, also known as EF, is one of the world’s largest providers of English education and training. In the last 50 years, EF has spread to more than 107 countries, offering educational travel, cultural exchanges, language, and school programs. Students who have been trained by EF are better positioned to work in a more connected world.

Additionally, EF has done significant research on the impact of speaking English. The EF English Proficiency Index (EF EPI) is a global standard of measuring the country-level competency in the English language. Data show that countries with higher English proficiency have significantly higher Gross National Income (GNI). For vulnerable people living in the world’s crowded spaces, the chance to master English may also be the chance at a better life.

The convergence of technology sophistication and affordability has created myriad new industries and employment opportunities for workers with the right sets of skills. Individuals who are able to code or do web development are finding their skills in demand all over the world.

CodePath is a unique organization that is creating opportunities for people everywhere to learn how to code for free. One of CodePath’s graduates took the curriculum to Haiti to share the program with 20 high school and college students with little to no programming experience.

In the process, the course was adapted to overcome the barriers faced by local students: poor infrastructure, slow or limited Internet access, and lack of inspiration and confidence. By supporting individual students to enter a field that once seemed out of reach, CodePath is helping youth in emerging economies find work and a more promising future.
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